## WHAT IS CLAIMED IS:

A grinding wheel comprising:

an annular core body which includes a multiplicity of aggregate particles and a resin bond that holds said aggregate particles together;

an abrasive layer which is disposed radially outwardly of said annular core body and which includes a multiplicity of abrasive grains and a vitrified bond that holds said abrasive grains together; and

an impermeable coating which is formed of a synthetic resin, and which is disposed on said annular core body.

- 2. A grinding wheel according to claim 1, wherein said annular core body further includes at least one sheet of glass fabric each of which is provided by a multiplicity of glass yarns and each of which is embedded in said annular core body and extends perpendicularly to an axial direction of said annular core body.
- 3. A grinding wheel according to claim 2, wherein said at least one sheet of glass fabric consists of a plurality of sheets of glass fabric which are arranged in said axial direction of said annular core body.
- 4. A grinding wheel according to claim 1, wherein said abrasive layer is provided by a plurality of abrasive

segment chips which are arranged in a circumferential direction of said annular core body and which are fixed to an outer circumferential surface of said annular core body.

- 5. A grinding wheel according to claim 4, wherein said plurality of abrasive segment chips includes at least one pair of segment chips having respective circumferentially end faces which are circumferentially opposed to each other with a predetermined amount of gap therebetween and which are non-parallel with respect to an axial direction of said annular core body.
- 6. A grinding wheel according to claim 1, wherein said annular core body is covered at an entirety thereof with said impermeable coating, so that a portion of said impermeable coating disposed on an outer circumferential surface of said annular core body is interposed between said annular core body and said abrasive layer.
- 7. A grinding wheel according to claim 1, wherein said impermeable coating is formed of an epoxy resin.
- 8. A grinding wheel according to claim 1, wherein said impermeable coating is formed of a phenol resin.